



Visualisation; Diagnostics

Easy to Configure

Programming IEC 61131-3

Rapid Installation

PNOZ msi1Ap, PNOZ msi1Bp, PNOZ msi3Ap, PNOZ msi3Bp

PILZ

THE SPIRIT OF SAFETY

► Accessories PNOZmulti

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SD means Secure Digital

Description

The connection cable PNOZ msi1Ap, PNOZ msi1Bp, PNOZ msi3Ap, PNOZ msi3Bp is used to connect an encoder to the speed monitors PNOZ ms1p, PNOZ ms2p, PNOZ ms3p, PNOZ ms4p or PNOZ s30.

The connection to the speed monitor is made via the RJ45 connector.



INFORMATION

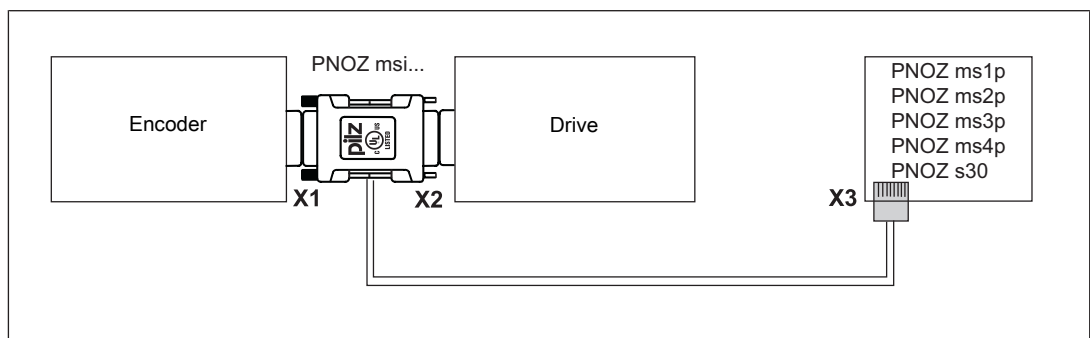
Remove the protective cover of the RJ45 connector after installation in the control cabinet.



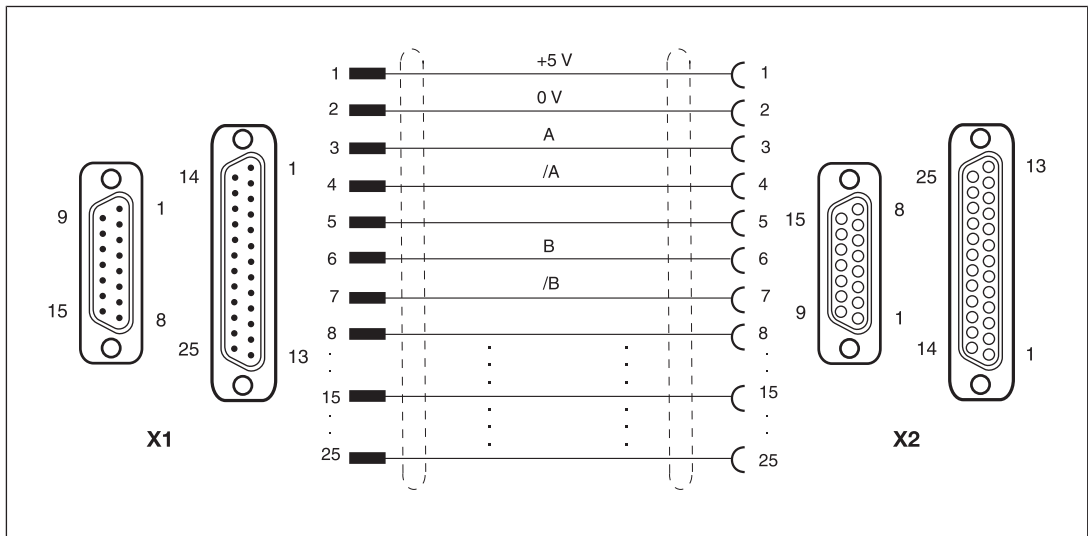
CAUTION!

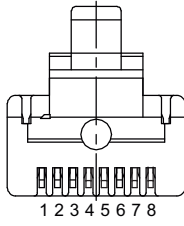
Communication errors may occur if the adapter cable is too long or there are any external sources of interference. Use an adapter cable that's less than 5 m in length. Lay the adapter cable separately from any potential sources of interference, such as drive cables leading to the motor, for example.

Connection



Connector pin assignment



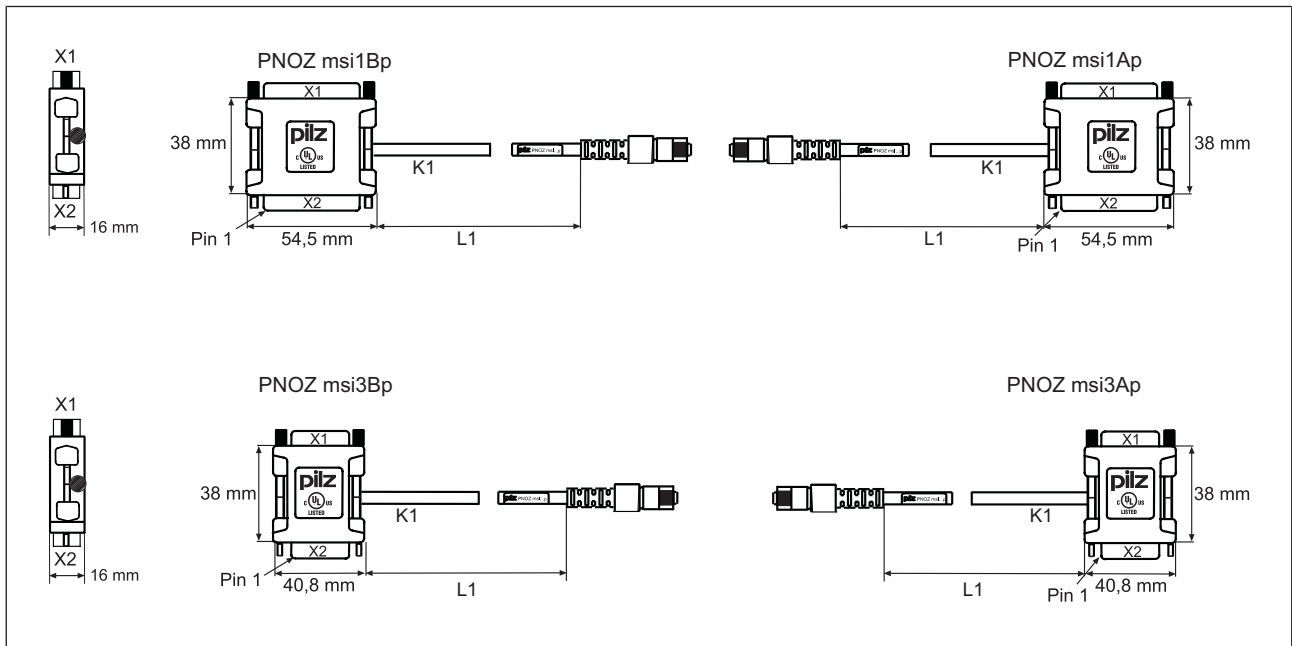
X3	Pin	Track
	1	5 V
	2	0 V
	3	n.c.
	4	A
	5	/A
	6	n.c.
	7	B
	8	/B



INFORMATION

The signals Z and /Z for the speed monitor PNOZ s30 are not recorded.

Dimensions



Technical details Order no. 773840, 773841, 773842

General	773840	773841	773842
Certifications	cULus Listed	cULus Listed	cULus Listed
Electrical data	773840	773841	773842
Operating voltage	30 V	30 V	30 V
Insulation resistance	10 MOhm	10 MOhm	10 MOhm
Environmental data	773840	773841	773842
Ambient temperature			
Temperature range	0 - 60 °C	0 - 60 °C	0 - 60 °C
Temperature range (moving)	0 - 60 °C	0 - 60 °C	0 - 60 °C
Storage temperature			
Temperature range	-25 - 70 °C	-25 - 70 °C	-25 - 70 °C
Condensation during operation	Not permitted	Not permitted	Not permitted
Protection type			
X1 when inserted	IP20	IP20	IP20
X2 when inserted	IP20	IP20	IP20
X3 when inserted	IP20	IP20	IP20
Housing	IP20	IP20	IP20
Mounting area (e.g. control cabinet)	IP54	IP54	IP54
Mechanical data	773840	773841	773842
Plug-in connector X1	25-pin D-Sub male connector	25-pin D-Sub male connector	15-pin D-Sub male connector
Form, plug-in connector X1	Straight	Straight	Straight
Plug-in connector X2	25-pin D-Sub female connector	25-pin D-Sub female connector	15-pin D-Sub female connector
Form, plug-in connector X2	Straight	Straight	Straight
Plug-in connector X3	8-pin RJ45 male connector	8-pin RJ45 male connector	8-pin RJ45 male connector
Design of plug-in connector X3	Straight	Straight	Straight
Fixing screws	UNC 4-40	UNC 4-40	UNC 4-40
Housing material X1	Nickel steel, tin-plated	Nickel steel, tin-plated	Nickel steel, tin-plated
Housing material X2	Nickel steel, tin-plated	Nickel steel, tin-plated	Nickel steel, tin-plated
Housing material X3	PBT	PBT	PBT
Material of contact surface X1	Au	Au	Au
Material of contact surface X2	Au	Au	Au
Material of contact surface X3	Au	Au	Au
Material of pin	Cu alloy	Cu alloy	Cu alloy

Mechanical data	773840	773841	773842
Material of socket	Cu alloy	Cu alloy	Cu alloy
Mating cycles X1	50	50	50
Mating cycles X2	50	50	50
Mating cycles X3	1500	1500	1500
Cable length L1	2,5 m	2,5 m	2,5 m
Cable length tolerance K1	+/- 0,15 m	+/- 0,15 m	+/- 0,15 m
Colour of external cable insulation K1	Green, similar to RAL6018	Green, similar to RAL6018	Green, similar to RAL6018
Colour of housing	Black RAL 9005	Black RAL 9005	Black RAL 9005
Cable insulation material K1	PUR	PUR	PUR
Drag chain suitable K1	yes	yes	yes
Min. bending radius (fixed permanently) K1	8 x Ø	8 x Ø	8 x Ø
Min. bending radius (moving) K1	10 x Ø	10 x Ø	10 x Ø
Cable diameter K1	5,8 mm	5,8 mm	5,8 mm
Max. cable diameter K1	6 mm	6 mm	6 mm
Conductor cross section K1	0,14 mm²	0,14 mm²	0,14 mm²
Conductor cross section AWG K1	26	26	26
Wire colour K1	1: white, 2: brown, 3: green, 4: yellow, 5: grey, 6: pink, 7: blue, 8: red	1: white, 2: brown, 3: green, 4: yellow, 5: grey, 6: pink, 7: blue, 8: red	1: white, 2: brown, 3: green, 4: yellow, 5: grey, 6: pink, 7: blue, 8: red
Shielding K1	yes	yes	yes
Wire layer separation K1	No	No	No
No. of wires K1	8	8	8
Certification cable K1	UL AWM-Style 20233	UL AWM-Style 20233	UL AWM-Style 20233
Certification plug-in connector X1	UL94 V-0	UL94 V-0	UL94 V-0
Certification plug-in connector X2	UL94 V-0	UL94 V-0	UL94 V-0
Certification plug-in connector X3	UL94 V-0	UL94 V-0	UL94 V-0
Material			
Housing	TPE-SEBS UL 94 HB	TPE-SEBS UL 94 HB	TPE-SEBS UL 94 HB
Dimensions			
Height	38 mm	38 mm	38 mm
Width	54,5 mm	54,5 mm	40,8 mm
Depth	16 mm	16 mm	16 mm
Weight	140 g	140 g	135 g

Technical details Order no. 773843, 773839, 773844

General	773843	773839	773844
Certifications	cULus Listed	cULus Listed	cULus Listed
Electrical data	773843	773839	773844
Operating voltage	30 V	30 V	30 V
Insulation resistance	10 MOhm	10 MOhm	10 MOhm
Environmental data	773843	773839	773844
Ambient temperature			
Temperature range	0 - 60 °C	0 - 60 °C	0 - 60 °C
Temperature range (moving)	0 - 60 °C	0 - 60 °C	0 - 60 °C
Storage temperature			
Temperature range	-25 - 70 °C	-25 - 70 °C	-25 - 70 °C
Condensation during operation	Not permitted	Not permitted	Not permitted
Protection type			
X1 when inserted	IP20	IP20	IP20
X2 when inserted	IP20	IP20	IP20
X3 when inserted	IP20	IP20	IP20
Housing	IP20	IP20	IP20
Mounting area (e.g. control cabinet)	IP54	IP54	IP54
Mechanical data	773843	773839	773844
Plug-in connector X1	15-pin D-Sub male connector	25-pin D-Sub male connector	25-pin D-Sub male connector
Form, plug-in connector X1	Straight	Straight	Straight
Plug-in connector X2	15-pin D-Sub female connector	25-pin D-Sub female connector	25-pin D-Sub female connector
Form, plug-in connector X2	Straight	Straight	Straight
Plug-in connector X3	8-pin RJ45 male connector	8-pin RJ45 male connector	8-pin RJ45 male connector
Design of plug-in connector X3	Straight	Straight	Straight
Fixing screws	UNC 4-40	UNC 4-40	UNC 4-40
Housing material X1	Nickel steel, tin-plated	Nickel steel, tin-plated	Nickel steel, tin-plated
Housing material X2	Nickel steel, tin-plated	Nickel steel, tin-plated	Nickel steel, tin-plated
Housing material X3	PBT	PBT	PBT
Material of contact surface X1	Au	Au	Au
Material of contact surface X2	Au	Au	Au
Material of contact surface X3	Au	Au	Au
Material of pin	Cu alloy	Cu alloy	Cu alloy

Mechanical data	773843	773839	773844
Material of socket	Cu alloy	Cu alloy	Cu alloy
Mating cycles X1	50	50	50
Mating cycles X2	50	50	50
Mating cycles X3	1500	1500	1500
Cable length L1	2,5 m	5 m	5 m
Cable length tolerance K1	+/- 0,15 m	+/- 0,15 m	+/- 0,15 m
Colour of external cable insulation K1	Green, similar to RAL6018	Green, similar to RAL6018	Green, similar to RAL6018
Colour of housing	Black RAL 9005	Black RAL 9005	Black RAL 9005
Cable insulation material K1	PUR	PUR	PUR
Drag chain suitable K1	yes	yes	yes
Min. bending radius (fixed permanently) K1	8 x Ø	8 x Ø	8 x Ø
Min. bending radius (moving) K1	10 x Ø	10 x Ø	10 x Ø
Cable diameter K1	5,8 mm	5,8 mm	5,8 mm
Max. cable diameter K1	6 mm	6 mm	6 mm
Conductor cross section K1	0,14 mm²	0,14 mm²	0,14 mm²
Conductor cross section AWG K1	26	26	26
Wire colour K1	1: white, 2: brown, 3: green, 4: yellow, 5: grey, 6: pink, 7: blue, 8: red	1: white, 2: brown, 3: green, 4: yellow, 5: grey, 6: pink, 7: blue, 8: red	1: white, 2: brown, 3: green, 4: yellow, 5: grey, 6: pink, 7: blue, 8: red
Shielding K1	yes	yes	yes
Wire layer separation K1	No	No	No
No. of wires K1	8	8	8
Certification cable K1	UL AWM-Style 20233	UL AWM-Style 20233	UL AWM-Style 20233
Certification plug-in connector X1	UL94 V-0	UL94 V-0	UL94 V-0
Certification plug-in connector X2	UL94 V-0	UL94 V-0	UL94 V-0
Certification plug-in connector X3	UL94 V-0	UL94 V-0	UL94 V-0
Material			
Housing	TPE-SEBS UL 94 HB	TPE-SEBS UL 94 HB	TPE-SEBS UL 94 HB
Dimensions			
Height	38 mm	38 mm	38 mm
Width	40,8 mm	54,5 mm	54,5 mm
Depth	16 mm	16 mm	16 mm
Weight	129 g	226 g	226 g

Technical details Order no. 773876, 773877

General	773876	773877
Certifications	cULus Listed	cULus Listed
Electrical data	773876	773877
Operating voltage	30 V	30 V
Insulation resistance	10 MOhm	10 MOhm
Environmental data	773876	773877
Ambient temperature		
Temperature range	0 - 60 °C	0 - 60 °C
Temperature range (moving)	0 - 60 °C	0 - 60 °C
Storage temperature		
Temperature range	-25 - 70 °C	-25 - 70 °C
Condensation during operation	Not permitted	Not permitted
Protection type		
X1 when inserted	IP20	IP20
X2 when inserted	IP20	IP20
X3 when inserted	IP20	IP20
Housing	IP20	IP20
Mounting area (e.g. control cabinet)	IP54	IP54
Mechanical data	773876	773877
Plug-in connector X1	25-pin D-Sub male connector	25-pin D-Sub male connector
Form, plug-in connector X1	Straight	Straight
Plug-in connector X2	25-pin D-Sub female connector	25-pin D-Sub female connector
Form, plug-in connector X2	Straight	Straight
Plug-in connector X3	8-pin RJ45 male connector	8-pin RJ45 male connector
Design of plug-in connector X3	Straight	Straight
Fixing screws	UNC 4-40	UNC 4-40
Housing material X1	Nickel steel, tin-plated	Nickel steel, tin-plated
Housing material X2	Nickel steel, tin-plated	Nickel steel, tin-plated
Housing material X3	PBT	PBT
Material of contact surface X1	Au	Au
Material of contact surface X2	Au	Au
Material of contact surface X3	Au	Au
Material of pin	Cu alloy	Cu alloy
Material of socket	Cu alloy	Cu alloy
Mating cycles X1	50	50
Mating cycles X2	50	50
Mating cycles X3	1500	1500
Cable length L1	1,5 m	1,5 m
Cable length tolerance K1	+/- 0,15 m	+/- 0,15 m
Colour of external cable insulation K1	Green, similar to RAL6018	Green, similar to RAL6018
Colour of housing	Black RAL 9005	Black RAL 9005

Mechanical data	773876	773877
Cable insulation material K1	PUR	PUR
Drag chain suitable K1	yes	yes
Min. bending radius (fixed permanently) K1	8 x Ø	8 x Ø
Min. bending radius (moving) K1	10 x Ø	10 x Ø
Cable diameter K1	5,8 mm	5,8 mm
Max. cable diameter K1	6 mm	6 mm
Conductor cross section K1	0,14 mm²	0,14 mm²
Conductor cross section AWG K1	26	26
Wire colour K1	1: white, 2: brown, 3: green, 4: yellow, 5: grey, 6: pink, 7: blue, 8: red	1: white, 2: brown, 3: green, 4: yellow, 5: grey, 6: pink, 7: blue, 8: red
Shielding K1	yes	yes
Wire layer separation K1	No	No
No. of wires K1	8	8
Certification cable K1	UL AWM-Style 20233	UL AWM-Style 20233
Certification plug-in connector X1	UL94 V-0	UL94 V-0
Certification plug-in connector X2	UL94 V-0	UL94 V-0
Certification plug-in connector X3	UL94 V-0	UL94 V-0
Material		
Housing	TPE-SEBS UL 94 HB	TPE-SEBS UL 94 HB
Dimensions		
Height	38 mm	38 mm
Width	54,5 mm	54,5 mm
Depth	16 mm	16 mm
Weight	131 g	131 g

Order reference

Product type	Features	Connector X1	Connector X2	Connector X3	Order no.
PNOZ msi1Ap Adapter Si/Ha 25/25 2.5m	2.5 m	25-pin D-Sub male connector	25-pin D-Sub female connector	8-pin RJ45 male connector	773 840
PNOZ msi1Bp Adapter Si/Ha 25/25 2.5m	2.5 m	25-pin D-Sub male connector	25-pin D-Sub female connector	8-pin RJ45 male connector	773 841
PNOZ msi3Ap Adapter Si/Ha 15/15 2.5m	2.5 m	15-pin D-Sub male connector	15-pin D-Sub female connector	8-pin RJ45 male connector	773 842
PNOZ msi3Bp Adapter Si/Ha 15/15 2.5m	2.5 m	15-pin D-Sub male connector	15-pin D-Sub female connector	8-pin RJ45 male connector	773 843
PNOZ msi1Bp Adapter Si/Ha 25/25 5m	5 m	25-pin D-Sub male connector	25-pin D-Sub female connector	8-pin RJ45 male connector	773 839
PNOZ msi1AP Adapter Si/Ha 25/25 5m	5 m	25-pin D-Sub male connector	25-pin D-Sub female connector	8-pin RJ45 male connector	773 844
PNOZ msi1Ap Adapter Si/He 25/25 1.5m	1.5 m	25-pin D-Sub male connector	25-pin D-Sub female connector	8-pin RJ45 male connector	773 876
PNOZ msi1Bp Adapter Si/He 25/25 1.5m	1.5 m	25-pin D-Sub male connector	25-pin D-Sub female connector	8-pin RJ45 male connector	773 877